

Title (en)  
DISPLAY DEVICE

Title (de)  
ANZEIGEVORRICHTUNG

Title (fr)  
DISPOSITIF D'AFFICHAGE

Publication  
**EP 4383986 A1 20240612 (EN)**

Application  
**EP 23213976 A 20231204**

Priority  
KR 20220169752 A 20221207

Abstract (en)

A display device includes pixel electrodes (PXE1, PXE2) spaced apart from each other, a first definition layer (DL1) defining reflective openings (RO1, RO2, RO3, RO4) opening a first area of each of the pixel electrodes (PXE1, PXE2), reflective electrodes (LEE1, LEE2) disposed on the first area of each of the pixel electrodes (PXE1, PXE2), extending from the first area of each of the pixel electrodes (PXE1, PXE2) to the first definition layer (DL1), and spaced apart from each other, a second definition layer (DL2) disposed on the first definition layer (DL1) and defining pixel openings (PO1, PO2, PO3, PO4) opening a second area of each of the reflective electrodes (LEE1, LEE2), light emitting layers (EL1, EL2) disposed on the second area of each of the reflective electrodes (LEE1, LEE2) within the pixel openings (PO1, PO2, PO3, PO4), a common electrode (CE) overlapping the light emitting layers (EL1, EL2) and the second definition layer (DL2) in plan view, an encapsulation layer (EN) overlapping the common electrode (CE) in plan view, a capping layer (CPL) disposed on the encapsulation layer (EN), and a low refractive index layer (RL) disposed on the capping layer (CPL).

IPC 8 full level

**H10K 59/80** (2023.01); **H10K 59/122** (2023.01)

CPC (source: CN EP KR US)

**H10K 50/805** (2023.02 - CN); **H10K 50/81** (2023.02 - KR); **H10K 50/818** (2023.02 - KR); **H10K 50/82** (2023.02 - KR);  
**H10K 50/844** (2023.02 - CN KR); **H10K 50/856** (2023.02 - KR); **H10K 50/858** (2023.02 - CN KR); **H10K 59/12** (2023.02 - CN);  
**H10K 59/122** (2023.02 - CN EP KR US); **H10K 59/32** (2023.02 - CN); **H10K 59/805** (2023.02 - CN); **H10K 59/873** (2023.02 - CN EP);  
**H10K 59/875** (2023.02 - EP); **H10K 59/878** (2023.02 - EP US); **H10K 59/879** (2023.02 - CN US)

Citation (search report)

- [YA] EP 3910681 A1 20211117 - SAMSUNG DISPLAY CO LTD [KR]
- [YA] WO 2022025365 A1 20220203 - SAMSUNG DISPLAY CO LTD [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4383986 A1 20240612**; CN 118159066 A 20240607; KR 20240085321 A 20240617; US 2024196710 A1 20240613

DOCDB simple family (application)

**EP 23213976 A 20231204**; CN 202311668587 A 20231206; KR 20220169752 A 20221207; US 202318509472 A 20231115